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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99 )		Application Number				
		Filing Date				
		First Named Inventor		Alvin Janski		
		Art Unit				
		Examiner Name				
		Attorney Docket Number		KEDI 8828 W1		

**U.S.PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6416479	B1	2002-07-09	Seidman	

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
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Application Number	
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First Named Inventor	Alvin Janski
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1	K. SYLVESTER, R. PATEY, J. HALL, G. FAFFERTY, M. DICK, S.L. THEIN, A. GREENOUGH, "Measurement of exhales carbon monoxide in children with sickle cell disease", Presentation abstract published in European Respiratory Journal 2002, Supplement 38, pg. 139, London, United Kingdom, Presented at ERS Annual Congress, Stockholm, Sept. 15, 2002.	<input type="checkbox"/>
2	Copy of Written Opinion of the International Searching Authority corresponding to International Application No. PCT/US05/03398.	<input type="checkbox"/>
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 Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.  
 None

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A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	<i>Mark E. Books</i>	Date (YYYY-MM-DD)	<i>2006-07-27</i>
Name/Print	Mark E. Books	Registration Number	40918

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## Measurement of exhaled carbon monoxide in children with sickle cell disease

K. Sylvester, R. Patey, J. Hall, G. Rafferty, M. Dick, S. L. Thein, A. Greenough (London, United Kingdom)

**Background:** Carboxyhaemoglobin (COHb) is elevated in conditions of haem catabolism. End tidal exhaled carbon monoxide (ETCO) is related to COHb and can be measured nasally in all age groups. We hypothesised that in children with sickle cell disease (SCD) ETCO would be elevated and reduced by blood transfusion. **Methods:** ETCO was measured in non smoking subjects: 10 SCD children in steady state (mean age 10.5yrs, range 3.5 to 13.4yrs), 10 healthy ethnic-matched controls (mean age 10.3yrs, range 3.4 to 15.6yrs) and 11 SCD children (mean age 10.7yrs, range 5.2 to 17.6yrs) undergoing a regular blood transfusion to reduce SCD complications. ETCO, corrected for background CO (ETCOc), was measured by the CO-Stat<sup>(R)</sup> End Tidal Breath Analyzer (Natus Medical Inc., San Carlos, CA). In the transfusion group, ETCOc was measured before, midway and at the end of the transfusion. **Results:** ETCOc levels were higher ( $p<0.0001$ ) in the SCD children in steady state (mean 5.6, 95% CI 4.3 to 6.9ppm) than the controls (mean 1.5, 95% CI 1.1 to 1.9ppm). In the transfusion group, ETCOc was lower during (mean 5.8, 95% CI 4.5 to 7.1ppm,  $p = 0.048$ ) and after (mean 5.3, 95% CI 3.8 to 6.7ppm,  $p = 0.01$ ) the transfusion compared to before transfusion (mean 6.3ppm, CI 4.7 to 7.8). **Conclusion:** These preliminary results suggest ETCO measurement could be a useful method of monitoring SCD children at risk of haemolytic crises and their response to treatment.

*Eur Respir J* 2002; 20: Suppl. 38, 139s

This abstract was presented at the ERS Annual Congress Stockholm 2002 on Sunday 15.09.2002 in session 110 : "Paediatric respiratory physiology - clinical aspects".